Smart Card, Dongle, Microcontroller & Pld Device Security.

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Smart Card Security Evaluation.

Dongles and Software Protection.

New microcontrollers in your products

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Smart Card Security Evaluation Independent laboratory tests to determine the security level.

New applications for the smart card are appearing every day. Satellite decoder access using the smart card has been in use for several years and many companies including banks around the World are now looking to replace the magnetic stripe card with the more secure silicon technology.

It is to these corporate clients that we respectfully offer our service. The manufactures of secure smart cards face a special challenge. As the customer demands more functionality the silicon chip becomes more difficult to manufacture.

The security features incorporated in the design increase the cost not only in real estate (silicon area used) but in all areas of production and testing.

The competitive nature of the semiconductor smart card industry demands that all areas of the technology must be periodically scrutinised with a view to holding down costs - this includes the overhead of the security features and procedures.

We know that not all smart cards are 100% secure and any manufacturer who claims that they are is not listening in at street level - and why should they listen after spending £100,000,000 on developing and producing the silicon, sales must be made in order to finance the even smarter cards of tomorrow.

In our silicon security laboratory we will examine your smart card and with your help identify the areas where a breach of security could effect your business or reputation.
Appropriate action can only be taken when you know the limitations of your particular smart card.

Corporate clients can arrange an appointment through our London office.

Dongles and Software Protection - Choose the level of security you require.

The dongle is an electronic software protection device built in a small plastic box that plugs into the parallel port of your PC. Ddongles are supplied only with the original software package.

The dongle prevents illegal copies of the software from being sold because without the dongle the copied software will not run and is therefore useless.

For software houses we offer a dongle evaluation service which will identify any security weaknesses that might exist with a particular manufactures dongle.

As new low cost dongles are introduced be sure they meet your minimum-security requirements, only an independent evaluation will reveal the true level of protection they provide.

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New microcontrollers in your products - If your products can be copied you could be undersold.

The microcontroller chip is similar in many respects to the more familiar microprocessor chip used in your PC.

The microcontroller has some or all of its memory as well as certain peripheral functions built on the same piece of silicon as the CPU. It's really a computer on a chip although its power is Somewhat limited by the use of this internal memory.

However its this very fact that the memory is internal that prevents the functionality of the chip from being copied.

The internal memory is first loaded with the programme code that makes the device operate. The memory is then secured by a special command, this means that the programme code is locked in and can not be read out or copied.

Silicon security services have studied the technology used by the various manufactures to secure the microcontrollers memory and can assist product manufactures in selecting the right device for a secure application.

The less secure microcontroller memories can be read out although this is not by any means a trivial procedure. Please contact our London office if you have a particular application that you would like to discuss with us.

Programmable logic devices are secured in a similar way to microcontrollers and require about the same amount of effort to reverse the protection system.

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office.

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